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ERRATA

Abstr. 1044, line 4: *for* monograph *read* nomograph

Abstr. 1230, line 9: *for* $y_p^2 1$ *read* $y_p^2 - 1$

for $y - \frac{3}{p} - 7_{yp}$ *read* $y_p^3 - 7y_p$

Abstr. 1450, line 3: *for* Hellweger *read* Hellwege

Abstr. 2004, line 4; 2018, line 4; 2128, line 3; 2300, line 6: *for* Bull. Patna Sci. Coll. *read* Bull. Patna Sci. Coll., Phil. Soc.

Abstr. 2079, line 4: *for* pp. 37–44 *read* pp. 137–144

Page 210, line 14: *for* 2335, *read* 2235

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LIST OF JOURNALS

Aeronaut. Engng Rev.	Aeronautical Engineering Review. Easton, Pa.
Aeroplane	Aeroplane. London.
Aircr. Engng	Aircraft Engineering. London.
Aircr. Prod.	Aircraft Production. London.
Akust. Z.	Akustische Zeitschrift. Leipzig.
Aluminium	Aluminium. Berlin.
Amer. Foundrym.	American Foundryman. Chicago.
Amer. J. Phys.	American Journal of Physics. New York.
Amer. J. Roentgenol. and Radium Ther.	American Journal of Roentgenology and Radium Therapy. Springfield, Ill.
Amer. J. Sci.	American Journal of Science. New Haven, Conn.
Ann. Astrophys. Obs. Smithson. Instn	Annals of the Astrophysical Observatory of the Smithsonian Institution. Washington, D.C.
Ann. Harv. Coll. Obs.	Annals of the Harvard College Observatory. Cambridge, Mass.
Ann. Math. Statist.	Annals of Mathematical Statistics. Baltimore, Md.
Ann. N.Y. Acad. Sci.	Annals of the New York Academy of Science. New York.
Ann. Phys., Lpz.	Annalen der Physik. Leipzig.
Ann. Solar Phys. Obs.	Annals of the Solar Physics Observatory. Cambridge.
A.R. Nat. Res. Coun. Can.	Annual Report of the National Research Council of Canada. Ottawa.
Arch. Eisenhüttenw.	Archiv für das Eisenhüttenwesen. Düsseldorf.
Arch. Elektrotechn.	Archiv für Elektrotechnik. Berlin.
Arch. Inst. Pasteur Algér.	Archives de l'Institut Pasteur d'Algérie. Algiers.
Arch. Neurol. Psychiat., Chicago	Archives of Neurology and Psychiatry. Chicago.
Arch. Sci. Phys. Nat.	Archives des Sciences Physiques et Naturelles. Geneva.
Arch. techn. Messen	Archiv für technisches Messen. Munich.
Arch. Wärmew.	Archiv für Wärmewirtschaft und Dampfkesselwesen. Berlin.
Ark. Mat. Astr. Fys.	Arkiv för Matematik Astronomi och Fysik. Stockholm and London.
Asea J.	ASEA Journal. Västerås, Sweden; and London.
Asoc. Nac. Ing. Industr.	Asociación Nacional Ingenieros Industriales. Madrid.
Astrophys. J.	Astrophysical Journal. Chicago.
Auto Engr	Automobile Engineer. London.
Aviation	Aviation. New York.
A.W.A. Techn. Rev. (Amal. Wireless Aust.)	Amalgamated Wireless (Australasia) Technical Review. Sydney.
Beama J.	Beama Journal. London.
Bell Lab. Rec.	Bell Laboratories Record. New York.
Bell Syst. Techn. J.	Bell System Technical Journal. New York.
Bell Teleph. Mag.	Bell Telephone Magazine. New York.
Blast. Furn.	Blast Furnace and Steel Plant. Pittsburgh.
Bol. Inst. Med. Exp. B. Aires	Boletín del Instituto de Medicina Experimental. Buenos Aires.
Brit. J. Photogr. Alm.	British Journal Photographic Almanac. London.
Brit. J. Radiol.	British Journal of Radiology. London.
Brit. Med. J.	British Medical Journal. London.
Brit. Plast. Mould. Prod. Tr.	British Plastics and Moulded Products Trader. London.
Brown Boveri Rev.	Brown Boveri Review. London.
BTH Activ. [British Thomson-Houston]	BTH Activities. Rugby.
Bull. Abastumani Astrophys. Obs.	Bulletin of the Abastumani Astrophysical Observatory. Mount Kanobili, Georgia.
Bull. Acad. Sci. Georgian SSR.	Bulletin of the Academy of Sciences of the Georgian SSR. Abastumani, Georgia.
Bull. Aero Res. Ltd., Cambridge	Bulletin of the Aero Research Ltd. Duxford, Cambridge.
Bull. Amer. Math. Soc.	Bulletin of the American Mathematical Society. Menasha, Wis., and New York.
Bull. Amer. Met. Soc.	Bulletin of the American Meteorological Society. Milton, Mass.
Bull. Amer. Phys. Soc.	Bulletin of the American Physical Society. New York.
Bull. Amer. Rly Engng Ass.	Bulletin of the American Railway Engineering Association. Chicago.
Bull. Amer. Soc. Test. Mater.	Bulletin of the American Society for Testing Materials. Philadelphia, Pa.
Bull. Ass. Suisse Élect.	Bulletin de l'Association Suisse des Électriciens. Zürich.
Bull. Calcutta Math. Soc.	Bulletin of the Calcutta Mathematical Society. Calcutta and Cambridge.
Bull. Harv. Coll. Obs.	Bulletin of the Harvard College Observatory. Cambridge, Mass.
Bull. Hydro-elect. Pwr Comm. Ont.	Bulletin of the Hydro-electric Power Commission of Ontario. Toronto.
Bull. Industr. Res. Coun. Dublin	Bulletin of the Industrial Research Council. Dublin.
Bull. Instn Radio Engrs, Aust.	Bulletin of the Institution of Radio Engineers, Australia. Sydney.
Bull. Lick Obs.	Bulletin of the Lick Observatory. Berkeley, Cal.
Bull. Math. Biophys.	Bulletin of Mathematical Biophysics. Chicago.
Bull. Oerlikon	Bulletin Oerlikon. London.
Bull. Patna Sci. Coll. Phil. Soc.	Bulletin of the Patna Science College Philosophical Society. Patna, India.
Bull. Sécheron	Bulletin Sécheron. Geneva.
Bull. Seism. Soc. Amer.	Bulletin of the Seismological Society of America. Berkeley, Cal.
Bull. Univ. Ill. Engng Exp. Sta.	Bulletin of the University of Illinois Engineering Experiment Station. Urbana, Ill.
Bull. Univ. Pittsburgh	Bulletin of the University of Pittsburgh. Pittsburgh.
Bull. U.S. Bur. Min.	Bulletin of the United States Bureau of Mines. Washington, D.C.
Canad. J. Res.	Canadian Journal of Research. Ottawa.
Carnegie Instn Yearb.	Carnegie Institution Yearbook. Washington, D.C.
Ceramic Age	Ceramic Age. Trenton, N.J.
Cheap Steam	Cheap Steam. London.
Chem. and Ind.	Chemistry and Industry. London.
Chem. Age, Lond.	Chemical Age. London.
Chem. Ztg	Chemiker Zeitung. Köthen, Anhalt.

Chem. Engng News	Chemical and Engineering News. Washington, D.C.
Circ. Harv. Coll. Obs.	Circular of the Harvard College Observatory. Cambridge, Mass.
Circ. Un. Obs., Johannesb.	Circular of the Union Observatory of South Africa. Johannesburg.
Circ. Univ. Ill. Engng Exp. Sta.	Circulars of the University of Illinois Engineering Experiment Station. Urbana, Ill.
Circ. U.S. Bur. Stand.	Circular of the United States Bureau of Standards. Washington, D.C.
Climatol. Data, W. Indies	Climatological Data. Washington, D.C.
Collegium, Haltingen	Collegium. Haltingen.
Colliery Engng	Colliery Engineering. London.
Commonw. Penn. Dep. Labour Industr., Safe Pract. Bull.	Commonwealth of Pennsylvania. Department of Labour and Industry, Safe Practice Bulletin. Harrisburgh, Pa.
Commun. Dublin Inst. Advanced Stud.	Communications of the Dublin Institute for Advanced Studies. Dublin.
Communications	Communications. New York.
Contr. Soc. Res. Meteorites	Contributions of the Society for Research on Meteorites. Los Angeles.
C.R. Acad. Sci. URSS.	Comptes Rendus de l'Acad. des Sciences de l'URSS. Moscow.
Curr. Sci.	Current Science. Bangalore.
Dermatologica, Basle	Dermatologica. Basle.
Diesel Rly Tract.	Diesel Railway Traction. Supplement to Railway Gazette and Railway News. London
Discovery	Discovery. London.
Distrib. Elect.	Distribution of Electricity. London.
Distribution	Distribution. Schenectady, N.Y.
Dtsch. Sportflieger	Deutsche Sportflieger. Leipzig.
Econ. Pap. U.S. Bur. Min.	Economic Papers of the Bureau of Mines. Washington, D.C.
Econ. Proc. Roy. Dublin Soc.	Economic Proceedings of the Royal Dublin Society. Dublin and London.
Edison Elect. Inst. Bull.	Edison Electric Institute Bulletin. Philadelphia, Pa.
Elect. Commun.	Electrical Communication. New York and London.
Elect. Engng, N.Y.	Electrical Engineering. New York.
Elect. Industr.	Electrical Industries. Maidenhead, Berks.
Elect. Pwr Engr	Electrical Power Engineer. Manchester.
Elect. Rev., Lond.	Electrical Review. London.
Elect. Times	Electrical Times. London.
Elect. Trading	Electrical Trading and Electricity. London.
Elect. Veh., Lond.	Electric Vehicles. Maidenhead, Berks.
Elect. World, N.Y.	Electrical World. New York and London.
Electrician	Electrician. London.
Elektrizität i. Bergbau	Elektrizität im Bergbau. Munich.
Electronic Engng	Electronic Engineering. London.
Electronics	Electronics. New York and London.
Elektroschweissung	Die Elektroschweissung. Brunswick.
Elektrosvyaz	Elektrosvyaz. Moscow.
E.L.M.A. Memor.	E.L.M.A. Memorandum. London.
Endeavour	Endeavour. London.
Engineer, Lond.	Engineer. London.
Engineering	Engineering. London.
Engl. Elect. J.	The English Electric Journal. Stafford, England.
Engng Boil. Ho. Rev.	Engineering and Boiler House Review. London.
Engng J. Can.	The Engineering Journal. Montreal.
Engng Suppl. Siemens Mag.	Engineering Supplement to Siemens Magazine. London.
ENT [Elekt. Nachr.-Techn.]	Elektrische Nachrichten-Technik. Berlin.
Ericsson Techn.	Ericsson Technics. Stockholm.
ETZ [Elektrotechn. Z.]	Elektrotechnische Zeitschrift. Berlin.
EuM [Elektrotechn. u. Maschinenb.]	Elektrotechnik und Maschinenbau. Vienna.
Fact. Mgmt Mainten.	Factory Management and Maintenance. New York.
Flugwehr u. Techn.	Flugwehr und Technik. Zürich.
Fmrs' Bull. U.S. Dep. Agric.	Farmers' Bulletin. United States Department of Agriculture. Washington.
Forsch. IngWes.	Forschung auf dem Gebiete des Ingenieurwesens. Ausgabe B. Berlin.
Found. Tr. J.	Foundry Trade Journal. London.
Foundry, Lond.	Foundry. London.
Fuel in Sci. and Pract.	Fuel in Science and Practice. London.
Gas Oil Pwr	Gas and Oil Power. Lockerbie, Dumfries.
G.E.C.J. [Gen. Elect. Co.]	G.E.C. Journal. London.
Gemmologist	Gemmologist. London.
Gen. Elect. Rev.	General Electric Review. Schenectady, N.Y., and London.
Geol. Mag. Lond.	The Geological Magazine. Hertford, England.
Geophysics	Geophysics. Austin, Texas.
Handb. U.S. Bur. Stand.	Handbook of the United States Bureau of Standards. Washington, D.C.
Harv. Met. Stud.	Harvard Meteorological Studies. Milton, Mass.
Heat. Vent. Engr	Heating and Ventilating Engineer. London.
Helv. Chim. Acta	Helvetica Chimica Acta. Basle.
Helv. Phys. Acta	Helvetica Physica Acta. Basle.
Hochfrequenztechn. u Elektroakust.	Hochfrequenztechnik und Elektroakustik. Leipzig.
Illum. Engng, N.Y.	Illuminating Engineering. Baltimore, Md.
Ind. and Pwr	Industry and Power. Michigan.
Indian J. Phys.	Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science. Calcutta.
Industr. Diamond Rev.	Industrial Diamond Review. London.

Industr. Engng Chem.	Industrial and Engineering Chemistry. Washington, D.C.
Industr. Engng Chem. (Analyt. Edit.)	Industrial and Engineering Chemistry (Analytical Edition). Washington, D.C.
Industr. Engng Chem. News Bull.	Industrial and Engineering Chemistry News Bulletin. Washington, D.C.
Industr. Heat.	Industrial Heating. Pittsburgh.
IngenVetensAkad. Handl.	Ingeniörsvetenskapsakademiens Handlingar. Stockholm.
Inst. Fuel War Time Bull.	Institute of Fuel War Time Bulletin. London.
Instruments	Instruments. Pittsburgh.
Iron Age	Iron Age. New York.
Iron Coal Tr. Rev.	Iron and Coal Trades Review. London.
Iron and Steel	Iron and Steel. Chicago.
Iron Steel Engr	Iron and Steel Engineer. Pittsburgh.
Inter Avia	Inter Avia. Geneva.
Izv. Elektroprom. Slab. Toka	Izvestiya Elektropromnishlennosti Slabogho, Toka, Moscow.
J. Acoust. Soc. Amer.	Journal of the Acoustical Society of America. New York.
J. Aero. Sci.	Journal of Aeronautical Sciences. Easton, Pa.
J. Amer. Ceram. Soc.	Journal of the American Ceramic Society. Easton, Pa.
J. Amer. Chem. Soc.	Journal of the American Chemical Society. Easton, Pa.
J. Amer. Concr. Inst.	Journal of the American Concrete Institute. Detroit, Mich.
J. Amer. Wat. Wks Ass.	Journal of the American Waterworks Association. Baltimore, Md.
J. Appl. Mech.	Journal of Applied Mechanics. New York.
J. Appl. Phys.	Journal of Applied Physics. New York.
J. Brit. Inst. Radio Engrs	Journal of the British Institute of Radio Engineers. London.
J. Chem. Phys.	Journal of Chemical Physics. New York.
J. Chem. Soc.	Journal of the Chemical Society. London.
J. Bact.	Journal of Bacteriology. Baltimore, Md.
J. Clin. Invest.	Journal of Clinical Investigation. Lancaster, Pa.
J. Electrodepos. Techn. Soc.	Journal of the Electrodepositors' Technical Society. London.
J. Exp. Psychol.	Journal of Experimental Psychology. Evanston, Ill.
J. Franklin Inst.	Journal of the Franklin Institute of the State of Pennsylvania. Lancaster and Philadelphia, Pa.
J. Gen. Physiol.	Journal of General Physiology. Baltimore, Md.
J. Hyg.	Journal of Hygiene. Cambridge.
J. Industr. Hyg. Toxicol.	Journal of Industrial Hygiene and Toxicology. Cambridge, Mass.
J. Inst. Fuel	Journal of the Institute of Fuel. London.
J. Inst. Met.	Journal of the Institute of Metals. London.
J. Inst. Petrol.	Journal of the Institute of Petroleum. London.
J. Instn Auto. Engrs	Journal of the Institution of Automobile Engineers. London.
J. Instn Civ. Engrs	Journal of the Institution of Civil Engineers. London.
J. Instn Elect. Engrs	Journal of the Institution of Electrical Engineers. London.
J. Instn Engrs, Aust.	Journal of the Institution of Engineers, Australia. Sydney.
J. Instn Heat Vent. Engrs	Journal of the Institution of Heating and Ventilating Engineers. London.
J. Iron Steel Inst.	Journal of the Iron and Steel Institute. London.
J. Jr. Instn Engrs	Journal of the Junior Institution of Engineers. London.
J. Lab. Clin. Med.	Journal of Laboratory and Clinical Medicine. St. Louis, Mo.
J. Lond. Math. Soc.	Journal of the London Mathematical Society. London
J. Mater. Test. USSR.	Journal of Material Testing, USSR.
J. Math. Phys.	Journal of Mathematics and Physics. Cambridge, Mass.
J. Minist. Agric.	Journal of the Ministry of Agriculture. London.
J. Mysore Univ.	Journal of the Mysore University. Bangalore.
J. Opt. Soc. Amer.	Journal of the Optical Society of America. New York.
J. Phys. Chem.	Journal of Physical Chemistry. Baltimore, Md., and London.
J. Phys., USSR.	Journal of Physics. Moscow and London.
J. Proc. Instn Mech. Engrs, Lond.	Journal and Proceedings of the Institution of Mechanical Engineers. London.
J. Res. Nat. Bur. Stand., Wash.	Journal of Research of the National Bureau of Standards. Washington, D.C.
J. Roy. Astr. Soc. Can.	Journal of the Royal Astronomical Society of Canada. Toronto.
J. Roy. Soc. Arts	Journal of the Royal Society of Arts. London.
J. Sci. Instrum.	Journal of Scientific Instruments. Reading.
J. Soc. Automot. Engrs, Phila.	Journal of the Society of Automotive Engineers. Philadelphia, Pa.
J. Soc. Chem. Ind., Lond.	Journal of the Society of Chemical Industry. London.
J. Soc. Dy. Col., Bradford	Journal of the Society of Dyers and Colourists. Bradford.
J. Soc. Glass Technol.	Journal of the Society of Glass Technology. Sheffield.
J. Soc. Mot. Pict. Engrs	Journal of the Society of Motion Picture Engineers. New York.
J. Techn. Phys., USSR.	Journal of Technical Physics, USSR. Moscow.
J. Televis. Soc.	Journal of the Television Society. London.
J. Text. Inst. Manchr	Journal of the Textile Institute. Manchester.
J. Univ. Bombay	Journal of the University of Bombay. Bombay.
J. Wash. Acad. Sci.	Journal of the Washington Academy of Sciences. Menasha, Wis.
Jernkontor. Ann.	Jernkontorets Annaler. Stockholm.
K. Fysiogr. Sällsk. Lund, Förh.	Kungliga Fysiografiska Sällskapets i Lund Förhandlingar. Lund, Sweden.
Kolloid-Beih.	Kolloid-Beihefte. Dresden-Blasewitz.
Kolloid Z.	Kolloid Zeitschrift. Dresden-Blasewitz.
Korrosion u. Metallsch.	Korrosion und Metallschutz. Leipzig.
Kuhlman Kurr.	Kuhlman Kurrents. Michigan.
Kunststoffe	Kunststoffe. Munich.
Laboratory	Laboratory. Pittsburgh.
Licht	Licht. Berlin.
Light and Ltg	Light and Lighting. London.
Light Metals	Light Metals. London.

Ltg Reconstruct. Pamphl. Illum. Engng Soc., Lond.	Lighting Reconstruction Pamphlet of the Illuminating Engineering Society. London.
Luftfahrtforsch.	Luftfahrtforschung. Munich.
Lunds Univ. Årsskr.	Lunds Universitets Årsskrift. Lund, Sweden.
Mach. Mkt.	Machinery Market. London.
Mach. Shop Mag.	Machine Shop Magazine. London.
Machinery, Lond.	Machinery. London.
Machinery, N.Y.	Machinery. New York.
Machinist	Machinist. London.
Marine Engr, Lond.	Marine Engineer. London.
Mech. Engng, N.Y.	Mechanical Engineering. New York.
Mech. Handl.	Mechanical Handling. London.
Mech. World	Mechanical World. Manchester and London.
Melliand Textilber.	Melliand Textilberichte. Mannheim.
Mem. India Met. Dep.	Memoirs of the India Meteorological Department. Simla.
Mem. Manchr Lit. Phil. Soc.	Memoirs and Proceedings of the Manchester Literary and Philosophical Society. Manchester.
Met. Z.	Meteorologische Zeitschrift. Brunswick.
Metal Finish.	Metal Finishing. Pittsburgh.
Metal Ind., Lond.	Metal Industry. London.
Metal Ind. Rev. USSR	Metal Industry Review of the USSR.
Metal Progr.	Metal Progress. Cleveland, Ohio.
Metal Treatm.	Metal Treatment. High Wycombe, Bucks.
Metallurgia, Manchr	Metallurgia. Manchester.
Metallwirtschaft	Metallwirtschaft. Berlin.
Metals and Alloys	Metals and Alloys. Easton, Pa.
Metals Technol.	Metals Technology. New York.
Metrop.-Vick. Gaz.	Metropolitan-Vickers Gazette. Manchester.
Min. Elect. Mech. Engr	Mining Electrical and Mechanical Engineer. Manchester.
Min. Mag.	Mines Magazine. Denver, Col.
Min. Technol.	Mining Technology. New York.
Miners' Circ. U.S. Bur. Min.	Miners' Circular. The United States Bureau of Mines. Washington, D.C.
Misc. Publ. U.S. Bur. Stand.	Miscellaneous Publications of the National Bureau of Standards. Washington, D.C.
Mod. Mach. Shop	Modern Machine Shop. Cincinnati, Ohio.
Mod. Plast.	Modern Plastics. New York.
Mod. Refrig.	Modern Refrigeration. London.
Mod. Transp.	Modern Transport. London.
Mon. Not. Geophys. Suppl. Roy. Astr. Soc.	Monthly Notices, Geophysical Supplement of the Royal Astronomical Society. London.
Mon. Not. Roy. Astr. Soc.	Monthly Notices of the Royal Astronomical Society. London.
Mon. Weath. Rev., Wash.	Monthly Weather Review. Washington, D.C.
Mot. Ship	Motor Ship. London.
Nature, Lond.	Nature. London.
Naturwissenschaften	Naturwissenschaften. Berlin.
Observatory	Observatory. London.
Oil Col. Tr. J.	Oil and Colour Trades Journal. London.
Oil Eng.	Oil Engine. London.
Osram Bull.	Osram Bulletin. London.
Pap. Inst. Fuel	Papers of the Institute of Fuel. London.
Pap. Instn Post Off. Elect. Engrs	The Institution of Post Office Electrical Engineers, Printed Papers. London.
Pap. Phys. Oceanogr. Met.	Papers in Physical Oceanography and Meteorology. Cambridge and Woods Hole, Mass.
Pap. Techn. Ass. Pulp. Pap. Ind., N.Y.	Papers of the Technical Association of the Pulp and Paper Industry. New York.
Paper Tr. J.	Paper Trade Journal. New York and Chicago.
Passngr Transp. J.	Passenger Transport Journal. Biggleswade, Beds.
Petrol. Engr	Petroleum Engineer. Tulsa, Oklahoma.
Petrol. Refin.	Petroleum Refiner. New York.
Pflüg. Arch. ges. Physiol.	Pflügers' Archiv für die gesamte Physiologie u. Menschen u. d. Tiere. Bonn.
Phil. Mag.	The London, Edinburgh and Dublin Philosophical Magazine and Journal of Science. London.
Philos. Trans.	Philosophical Transactions of the Royal Society of London. London.
Photogr. J.	Photographic Journal. London.
Phys. in regelmäss. Ber.	Die Physik in regelmässigen Berichten. Leipzig.
Phys. Rev.	The Physical Review. New York.
Phys. Z.	Physikalische Zeitschrift. Leipzig.
Physiol. Zool.	Physiological Zoology. Chicago.
Plant Physiol.	Plant Physiology. Lancaster, Pa.
Plastics	Plastics. Washington, D.C.
P.O. Elect. Engrs' J.	The Post Office Electrical Engineers' Journal. London.
Portugaliae Physica	Portugaliae Physica. Lisbon.
Power	Power. New York and London.
Proc. Amer. Acad. Arts Sci.	Proceedings of the American Academy of Arts and Sciences. Boston, Mass.
Proc. Amer. Electropl. Soc.	Proceedings of the American Electroplaters' Society. Springfield, Ill.
Proc. Amer. Phil. Soc.	Proceedings of the American Philosophical Society. Philadelphia, Pa.
Proc. Amer. Soc. Test. Mater.	Proceedings of the American Society for Testing Materials. Philadelphia, Pa.
Proc. Camb. Phil. Soc.	Proceedings of the Cambridge Philosophical Society. London.
Proc. Cent. Snow Conf.	Proceedings of the Central Snow Conference. East Lansing, Mich.

Proc. Indian Acad. Sci.	Proceedings of the Indian Academy of Sciences. Bangalore.
Proc. Indian Ass. Cult. Sci.	Proceedings of the Indian Association for the Cultivation of Science. Calcutta.
Proc. Inst. Radio Engrs, N.Y.	Proceedings of the Institute of Radio Engineers. New York.
Proc. Instn Radio Engrs, Aust.	Proceedings of the Institution of Radio Engineers, Australia. Sydney.
Proc. Iowa Acad. Sci.	Proceedings of the Iowa Academy of Sciences. Iowa.
Proc. Leeds Phil. Lit. Soc.	Proceedings of the Leeds Philosophical and Literary Society. Leeds.
Proc. Lond. Math. Soc.	Proceedings of the London Mathematical Society. London.
Proc. Nat. Acad. Sci., Wash.	Proceedings of the National Academy of Sciences. Washington, D.C.
Proc. Nat. Inst. Sci. India	Proceedings of the National Institute of Sciences of India. Calcutta.
Proc. Phys. Soc., Lond.	Proceedings of the Physical Society. London.
Proc. Roy. Instn	Proceedings of the Royal Institution of Great Britain. London.
Proc. Roy. Irish Acad.	Proceedings of the Royal Irish Academy. Dublin and London.
Proc. Roy. Soc.	Proceedings of the Royal Society of London. London.
Proc. Roy. Soc. Edinb.	Proceedings of the Royal Society of Edinburgh. Edinburgh and London.
Proc. Roy. Soc. Vict.	Proceedings of the Royal Society of Victoria. Melbourne.
Proc. Soc. Exp. Biol.	Proceedings of the Society for Experimental Biology and Medicine. New York.
Proc. Soil Sci. Soc. Amer.	Proceedings of the Soil Science Society of America. Morganstown, W. Virginia.
Proc. Univ. Durham Phil. Soc.	Proceedings of the University of Durham Philosophical Society. Newcastle upon Tyne.
Prod. Engng	Production Engineering. New York.
Publ. Astr. Soc. Pacif.	Publications of the Astronomical Society of the Pacific. San Francisco.
Publ. Dom. Astrophys. Obs. Vict., B.C.	Publications of the Dominion Astrophysical Observatory. Victoria, B.C.
Publ. Dom. Obs. Ottawa	Publications of the Dominion Observatory. Ottawa.
Publ. Fac. Cienc. Fís.-Mat. La Plata	Publicaciones de la Facultad de Ciencias Físico-Matemáticas de la Universidad Nacional de la Plata. La Plata.
Publ. Hlth Serv. Publ. Hlth Bull.	Public Health Service. Public Health Bulletin. Washington, D.C.
Pulp. Pap. Mag. Can.	Pulp and Paper Magazine of Canada. Montreal.
Pwr Plant Engng	Power Plant Engineering. Chicago.
Pwr Transm.	Power Transmission. London.
Quart. Appl. Math.	Quarterly of Applied Mathematics. Providence, R.I.
Quart. J. Math.	Quarterly Journal of Mathematics. Oxford.
Quart. J. Roy. Met. Soc.	Quarterly Journal of the Royal Meteorological Society. London.
Quart. Nat. Fire Prot. Ass.	Quarterly of the National Fire Protection Association. Boston, Mass.
Radiography	Radiography. London.
Radiology	Radiology. Syracuse, N.Y.
Rayon Text. Mon.	Rayon Textile Monthly. New York.
Receuil trav. sci. Polonais internés en Suisse	Receuil de travaux scientifiques des Polonais internés en Suisse. Winterthur, Switzerland.
Rep. Brit. Elect. Allied Industr. Res. Ass.	Reports of the British Electrical and Allied Industries Research Association. London.
Rep. Invest. U.S. Bur. Min.	Report of Investigations. The United States Bureau of Mines. Washington, D.C.
Rep. Phys. Soc. Progr. Phys.	Reports on Progress in Physics. London.
Repr. Univ. Ill. Engng Exp. Sta.	Reprint Series of the University of Illinois Engineering Experiment Station. Urbana, Ill.
Rev. Mod. Phys.	Reviews of Modern Physics. New York.
Rev. Sci. Instrum.	Review of Scientific Instruments. New York.
Rev. Univ. Nac. Tucumán	Revista de la Universidad Nacional de Tucumán. Tucumán, Argentine.
Rly Elect. Engr	Railway Electrical Engineer. New York.
Rly Gaz., Lond.	Railway Gazette. London.
Rly Signaling	Railway Signaling. Chicago.
Rubb. Age, N.Y.	Rubber Age. New York.
S. Afr. J. Sci.	South African Journal of Science. Cape Town.
S. Afr. Min. Engng J.	South African Mining and Engineering Journal. Johannesburg.
Schweiz. Arch. angew. Wiss. Techn.	Schweizer Archiv für angewandte Wissenschaft und Technik. Solothurn, Switzerland.
Schweiz. Bauztg	Schweizerische Bauzeitung. Zürich.
Sci. and Cult.	Science and Culture. Calcutta.
Sci. Notes India Met. Dep.	Scientific Notes of the India Meteorological Department. Simla.
Sci. Proc. Roy. Dublin Soc.	Scientific Proceedings of the Royal Dublin Society. Dublin and London.
Science	Science. Lancaster, Pa.
Seism. Obs. Bull. Univ. Pittsburgh	Seismological Observatory Bulletin of the University of Pittsburgh. Pittsburgh.
Sheet Metal Industr.	Sheet Metal Industries. London.
Shipbuild. Mar. Eng. Build.	Shipbuilder and Marine Engine Builder. London.
Shipbuild. Shipp. Rec.	Shipbuilder and Shipping Record. London.
Sky and Telescope	Sky and Telescope. Cambridge, Mass.
Spec. Publ. U.S. Cst Geod. Surv.	Special Publications of the Coast and Geodetic Survey. Washington, D.C.
Stahl u. Eisen	Stahl und Eisen. Düsseldorf.
Steel	Steel. Cleveland, Ohio.
Strowger J.	Strowger Journal. Liverpool.
Students' Quart. J. Instn Elect. Engrs	Students' Quarterly Journal of the Institution of Electrical Engineers. London.
Svenska VattenkrFören. Publ.	Svenska Vattenkraftföreningens Publikationer. Stockholm.

Swiss Techn.	Swiss Technics and Swiss Industry and Trade. Lausanne.
Techn. Bull. Instn Prod. Engrs	Technical Bulletin of the Institution of Production Engineers. London.
Techn. Not. Nat. Adv. Comm. Aero., Wash.	Technical Notes of the National Advisory Committee on Aeronautics. Washington, D.C.
Techn. Pap. U.S. Bur. Min.	Technical Papers of the United States Bureau of Mines. Washington, D.C.
Techn. Publ. Amer. Inst. Min. Metallurg. Engrs	Technical Publications of the American Institute of Mining and Metallurgical Engineers. New York.
Tekn. Tidskr.	Teknisk Tidskrift. Stockholm.
Terr. Magn. Atmos. Elect.	Terrestrial Magnetism and Atmospheric Electricity. Baltimore, Md.
Text. Rec.	Textile Recorder. Manchester.
Text. Res.	Textile Research. Lancaster, Pa.
Text. World	Textile World. New York.
TFT [Telegr.- Fernspr.- Funk.- u. Fernsehtechn.]	Telegraphen- Fernsprech- Funk- und Fernsehtechnik. Berlin.
Trans. Amer. Foundrym. Ass.	Transactions of the American Foundrymen's Association. Watchung, N.Y.
Trans. Amer. Geophys. Un.	Transactions of the American Geophysical Union. Washington, D.C.
Trans. Amer. Inst. Elect. Engrs	Transactions of the American Institute of Electrical Engineers. New York.
Trans. Amer. Math. Soc.	Transactions of the American Mathematical Society. Menasha, Wis., and New York.
Trans. Amer. Soc. Mech. Engrs	Transactions of the American Society of Mechanical Engineers. New York.
Trans. Amer. Soc. Met.	Transactions of the American Society for Metals. Cleveland, Ohio.
Trans. Electrochem. Soc.	Transactions of the Electrochemical Society. New York.
Trans. Faraday Soc.	Transactions of the Faraday Society. London.
Trans. Illum. Engng Soc., Lond.	Transactions of the Illuminating Engineering Society. London.
Trans. Inst. Mar. Engrs	Transactions of the Institute of Marine Engineers. London.
Trans. Inst. Weld.	Transactions of the Institute of Welding. London.
Trans. Instn Engrs Shipb. Scot.	Transactions of the Institution of Engineers and Shipbuilders in Scotland. Glasgow.
Trans. Instn Nav. Archit., Lond.	Transactions of the Institution of Naval Architects. London.
Trans. N.-E. Cst Instn Engrs Shipb.	Transactions of the North-East Coast Institution of Engineers and Shipbuilders. Newcastle upon Tyne.
Trans. N.Y. Acad. Sci.	Transactions of the New York Academy of Science. New York.
Trans. Roy. Soc. Can.	Transactions of the Royal Society of Canada. Ottawa.
Trans. Roy. Soc. Edinb.	Transactions of the Royal Society of Edinburgh. Edinburgh and London.
Trans. Roy. Soc. S. Aust.	Transactions of the Royal Society of South Australia. Adelaide.
Trans. S. Afr. Inst. Elect. Engrs	Transactions of the South African Institute of Electrical Engineers. Johannesburg.
Transp. World	Transport World. London.
Underwriters' Lab. Inc. Nat. Board Fire Underwriters, Bull. Res.	Underwriters' Laboratory of the Incorporated National Board of Fire Underwriters, Bulletin of Research. New York.
VDI [Z. Ver. dtsch. Ing.]	Zeitschrift des Vereines deutscher Ingenieure. Berlin.
Vjschr. Naturf. Ges. Zürich	Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich.
Wärme	Wärme. Berlin.
Weld. Engr	Welding Engineer. Chicago.
Weld. J.	Welding Journal. London.
Welder	Welder. London.
Welding	Welding. Pittsburgh.
Westinghouse Engr	The Westinghouse Engineer. East Pittsburgh, Pa.
Wire and W. Prod.	Wire and Wire Products. New York.
Wireless Engr	Wireless Engineer. London.
Wireless World	Wireless World. London.
Wiss. Veröff. Siemens-Werk.	Wissenschaftliche Veröffentlichungen aus den Siemens-Werken. Berlin.
Yale J. Biol. Med.	Yale Journal of Biology and Medicine. New Haven, Connecticut.
Yale Sci. Mag.	Yale Scientific Magazine. New Haven, Connecticut.
Z. angew. Math. Mech.	Zeitschrift für angewandte Mathematik und Mechanik. Berlin.
Z. Astrophys.	Zeitschrift für Astrophysik. Berlin.
Z. Elektrochem.	Zeitschrift für Elektrochemie und angewandte physikalische Chemie. Berlin.
Z. Fernmeldetechn.	Zeitschrift für Fernmeldetechnik, Werk- und Gerätebau. Munich.
Z. ges. Kälteindustr.	Zeitschrift für die gesamte Kälte-Industrie. Berlin.
Z. Kristallogr.	Zeitschrift für Kristallographie, Kristallgeometrie, Kristallphysik, Kristallchemie. Leipzig.
Z. Metallk.	Zeitschrift für Metallkunde. Berlin.
Z. Phys.	Zeitschrift für Physik. Berlin.
Z. phys. Chem.	Zeitschrift für physikalische Chemie (Abteilungen A und B). Leipzig.
Z. techn. Phys.	Zeitschrift für technische Physik. Leipzig.

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The system is based on the conception of the whole of human knowledge as unity, divided into ten domains represented by decimal fractions:

.0	Generalities
.1	Philosophy
.2	Religion
.3	Social sciences
.4	Philology
.5	Pure science
.6	Applied science
.7	Art
.8	Literature
.9	History and geography

On this foundation the system is constructed on the principle of proceeding from the general to the more particular by continued subdivision of the numbers into decimal fractions.

Thus every concept within the domain of Pure Science is represented by a decimal fraction greater than .5 and less than .6, the first groups being

.50	General works on pure science
.51	Mathematics
.52	Astronomy
.53	Physics
.54	Chemistry. Crystallography
.55	Geophysics
.56	Palaeontology
.57	Biology
.58	Botany
.59	Zoology

For convenience the first decimal point is always omitted, but it is essential that it should remain imprinted on the reader's mind. The fact that all the numbers are in reality decimal fractions less than unity determines the arrangement of the numbers in numerical sequence. Thus 526 (meaning .526) precedes 53 (meaning .53) in ascending order.

To indicate a work dealing with two or more subjects independently, the numbers corresponding to these subjects are connected by + signs. Thus

531.754 + 536.62	Measurement of density and of specific heat

More important, and more widely used, is the symbol denoting some functional relation between two or more concepts, expressed by the respective numbers linked by the colon sign.

Thus

537.531	X-rays
535.4	Diffraction
548.0	Crystals
537.531 : 535.4 : 548.0	X-ray diffraction by crystals

Further symbols, for the use of which the reader is referred to B.S. 1000, Vol. 1, Part 1, may be used for indicating form, place, language, etc., e.g.

historical:	538.7(09)	Early geomagnetic instruments
place:	551.524.2(73)	Temperature maps of the United States
language:	548.55 = 3	Monocrystalline tungsten wires (in German)

The arrangement in each monthly issue is numerical, according to the U.D.C. numbers. Cross-references, indicated by compound numbers linked by the colon symbol, are given in their proper places, according to each component number. Thus abstracts with compound indices such as

537.531 : 535.4 : 548.0	X-ray diffraction by crystals

are given under 537.531 X-rays, and quoted again under 535.4 Diffraction, and 548.0 Crystals, so that the subject of the abstract is indicated to the searcher in every one of the three fields.

The following abridged tables of the sections

51	Mathematics
52	Astronomy. Geodesy
53	Physics

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51 MATHEMATICS

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.12	Addition, subtraction, multiplication and division of integers
.13	Factors. Fractions. Decimals. Percentages. Proportion
.14	Extraction of roots. Surds. Imaginaries
.15	Arithmetical use of logarithms
.16	Operations with concrete units
.2	General properties of numbers. Residues
.22	Congruences. Indeterminate analysis of the first degree
.23	Quadratic residues
.24	Complex numbers of the form $a + b\sqrt{-1}$
.28	Theory of prime numbers
.4	Forms. Systems of forms
.5	Indeterminate equations of order higher than the first
.6	Algebraic numbers
511.7	Theory of continued fractions
.8	Transcendental numbers
512	**ALGEBRA**
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.14	Binomial formula. Powers of polynomials
.2	Equations and functions of the first and second degree
.3	Theory of equations. Polynomials
.4	Solution of equations by radicals
.5	Rational fractions. Interpolation
.8	Higher algebra
.83	Determinants. Matrices
.86	Linear substitutions. Groups See also 519.4 Theory of groups
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.89	Theory of forms
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.02 Analytical treatment
.03 Infinitesimal methods
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.11/.15 Triangles
.17 Anharmonic ratio. Homography. Harmonic division. Involution
.18 Quadrilaterals
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513.3 **Solid geometry**
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Special Analytical Subdivisions

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.02 General laws
.03 Production and causes of the phenomenon
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